

Educational Technology Leadership Master's Program:

Comprehensive Examination

Jessica M. Alanis

Lamar University

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This comprehensive examination paper will allow me to gather and share everything I have done and learned in the past eighteen months. There are so many new technologies that are available to everyone. Much of the new Web 2.0 technology is available for free on the internet via open source software (Soloman & Schrum, 2007). I believe that too many educators are not aware of the available technology, which motivates me to learn all I can so that I may share the knowledge and the wealth of information that is available. This paper is providing me with a forum to do just that.

Career and Leadership Goals

The Educational Technology Leadership program at Lamar University provides its students with a knowledge base ranging from technology laws and policies to learning how to find and use Web 2.0 technology available on the internet. All of the knowledge I gained in this program has motivated me to apply for the technology liaison position on my campus. This position is the perfect way to share technology information with others. The technology liaison is responsible for helping teachers integrate technology seamlessly into the curriculum as well as introducing new and emerging technologies to the educators on the campus. The technology liaison position would allow me to do exactly what this leadership program has motivated me to do which is share the knowledge and the wealth of information that is available.

As we learned throughout Lamar's Educational Technology Leadership program, too many educators are still not integrating technology into the curriculum. Prensky (2001) reiterates how important technology is to the twenty-first century learner. He states that twenty-first century learners "accustomed to the twitch-speed, multitasking, random-access, graphics-

first, active, connected, fun, fantasy, quick-payoff world of their video games, MTV, and Internet are bored by most of today's education...worse, the many skills that new technologies have actually enhanced (e.g. parallel processing, graphics awareness, and random access) – which have profound implications for their learning – are almost totally ignored by educators” (Prensky, 2001, p.5). When considering the impact that not integrating technology can have on students, it is scary to think that there are still many educators who are not up-to-date. In addition to the lack of educator support for technology integration that is still out there, many students do not have regular access to technology. As the technology leader on my campus, I want to help in developing and implementing ways to provide more technology access to our students, a majority of whom are of low socio-economic status.

If only the two goals mentioned above are accomplished at my school, I believe the difference in student performance would be evident in their overall achievement. Appropriate technology integration and technology access to students has the potential to help my school meet several of its stated improvement goals, including increasing state-mandated testing scores. I think of it as a Domino Effect. Appropriate technology integration promotes improved student motivation and interaction. Improved student motivation and interaction promotes increased student performance. Increased student performance impacts overall school improvement positively, which in turn promotes an *Exemplary* rating. Technology integration is highly beneficial for all stakeholders and is no longer a choice. It is a must.

Vision

Students in school today were born in a world where global networks are not only a reality, but can be accessed easily and instantaneously (Johnson, Smith, Willis, Levine, & Haywood, 2011). These students require instant access to materials and feedback from teachers

as well as peers. Unfortunately, schools are having difficulty keeping up with student needs. According to Armstrong and Warlick (2004), “The challenge for educators lies in keeping up with an information environment that has changed dramatically in the past 10 years...we [must] emphasize skills that reflect the information environment of the present, not the past” (p. 20). One very important way to enable educators to emphasize skills that reflect the current needs of students is to prepare in the present for what the future may bring. Classrooms must be set up to allow for flexibility and optimal learning opportunities. As the technology facilitator in my school, I will do all I can to ensure that educators are technology-savvy and all students have access to lots of different technology.

My vision is for all classrooms to have technology seamlessly and wirelessly integrated into every aspect of teaching, learning, and assessment for all grade levels. The teachers in my school would be required to promote the ongoing use of technology in the classroom while increasing student technology literacy skills. Teachers would utilize professional development, 21st century classroom practices, administrative and network support, as well as parent and community involvement to ensure the success of students using technology (Richard, 2007). Students would begin their day by entering their classroom, having a seat at their desk or table, and viewing the morning announcement via the Promethean Board. Each student would be assigned a clicker that will be utilized throughout the day during the presentation of lessons to promote student engagement and assess student learning (Student Response Systems Overview, n.d.). These clickers would work in any room throughout the school because all of the classrooms would have the same technology available to their students. In addition to the use of clickers, students would also use their mobile devices to interact with the teacher and with each other. Johnson et al. (2011) assert that mobiles can be implemented into classroom activities

easily. Mobiles can be used as a way to monitor student understanding of concepts before, during, and after the lesson. Implementing the use of mobiles, particularly mobile phones, would help to meet my goal of increasing access to all students.

Students would also be able to engage in electronic books through their mobile devices. This is a win-win for everyone involved. Many books are less expensive when purchased for digital use and students would have access to more resources when reading such as an online dictionary and links to more information about the specific topic. Although it requires more research on my part, I would like to implement the use of Augmented Reality books on my campus. These books could be utilized to emphasize the knowledge base of a strong student and enhance comprehension for a struggling student. Groups could use their mobile devices to research items or artifacts important to the lesson using augmented reality. They could get a better understanding of that specific object in the past or possibly what it would be like in the future. Students could also use this technology to learn more from field trips and community-based learning events.

Districts across the country are currently embracing technology and the benefits that are derived from its integration. Many districts will revise technology plans and goals to allow for more integration of technology; specifically, the use of game-based learning. I would hope to make game-based learning a major part of the learning environment in my school. The students could work in groups to play games that would be designed to promote teamwork, collaboration, and problem-solving skills. To enable the games to engage students to the maximum extent, they would pertain to the specific unit being taught and last throughout the entire unit. The groups would be expected to solve the problem by the end of the unit. These games would help

struggling students learn the concepts being taught in that unit. They would also help the strong students broaden their knowledge of the subject matter.

Although this vision of educational technology use in a public school is at the very least a few years away from reality, it serves as a plan of action and gives the educators and students in the school something to look forward to. Much of the technology mentioned in this discussion is already available; however, with budget constraints and ever-shrinking funds, it is likely that many of today's students will never see these emerging technologies implemented in their classrooms. At this point in time, it is up to educators to take advantage of the technology that is readily available (e.g., smart boards, document cameras, and flip charts) and to fight for the emerging technology that has the great potential to benefit their students.

Knowledge Gained

Self-awareness

When I started the Educational Technology Leadership program eighteen months ago, I had never heard of a wiki, never produced a newsletter, never truly considered copyright laws when creating a product for the classroom, and I had never created a podcast or an animation film. If you had asked me eighteen months ago about Web 2.0 technologies, I would not have even known what you were talking about. Now, after going through the program, I feel confident in my ability to not only understand the concepts mentioned above, but to help others learn about and use many types of new technologies. Being what Prensky (2001) refers to as a digital immigrant, I never considered myself the type to get interested in technology. However, after completing the first two courses in this program, I was hooked. I was amazed at all the technology that was available to educators for the betterment of their students. As if the

technology was not enough, I was astounded to learn that there are a lot of fine and helpful open-source (free) technologies available. Throughout the course of the last eighteen months, the most significant thing I learned about myself was that I can learn about and understand technology just as well as anyone else. I do not have to be scared when something new comes out. I now view emerging technologies as exciting and look forward to seeing what the future holds.

Technology and Leadership Skills

The most fascinating part of this program was learning about Web 2.0 and what it has to offer. I remember being amazed when reading *Web 2.0 New Tools, New Schools* by Solomon & Schrum (2007) and *Using Technology with Classroom Instruction that Works* by Pitler, Hubbell, Kuhn, and Malenoski (2007). Pitler et al. (2007) provide excellent strategies for implementing technology in the classroom and even provide many great resources to make technology integration easier for teachers. Experiencing this educational technology program has reiterated how fast technology changes and how frequently new technologies are becoming available. Although this frequent change is beneficial in that every time something new comes out, it is better and usually easier to use than what is currently available; this frequent change is also what scares too many digital immigrants into hiding from or becoming resistant to technology. This brings up another significant concept that was an integral part of this program: Leadership. Not only did I learn about different types of technology and how they can be beneficial in the classroom, I also learned how to be an effective leader. I learned how to show others how to integrate available technology into the curriculum effectively. The ISTE standards and performance indicators (Williamson & Redish, 2009) were extremely helpful in teaching me about what is expected of a technology facilitator and leader. Learning about these standards helped focus my attention on what a technology facilitator/leader should be doing in order to

enable educators to become proficient technology users. Learning about these technology standards helped me develop adept leadership skills, which has benefited the educators and students in my school. I was able to focus my attention on what is really important while at the same time meeting the individual needs of teachers. I have learned that being an effective leader is about collaboration with and empowerment of the stakeholders involved. My leadership skills have blossomed throughout the course of this program. It is my hope that I continue to grow as a leader and become even more effective for the benefit of the educators I work with and the students who depend on us.

Attitudes

Before starting this program, I had an ambivalent attitude toward technology. I appreciated what was out there and easy to use, but was not really interested in learning about new and emerging technologies. I was hesitant to explore up-and-coming technologies because I felt that they would be difficult to keep up with. In the past eighteen months, this attitude has completely changed. I learned that I really do like learning about and experimenting with educational technology. I am excited about the possible effects that a wiki, blog, or podcast could have on student performance and teacher interactions. I am excited to see what we as educators can do to make learning more fun, appropriate, and relevant for our 21st century learners. With regard to technology, my attitude now is more upbeat and excited. I look forward to exploring emerging technologies and feel ready take on the new challenges.

Six Most Influential Classes

EDLD 5306 Concepts of Educational Technology

I found *Concepts of Educational Technology* to be very enlightening. It was the first class I took in this program and it really helped to lay the foundation for understanding why technology is so important and why we as educators must begin the process of technology integration as soon as possible. Before taking this course, I had never heard of the *Texas Long Range Plan for Technology* (2006) and did not really understand why I had to complete the STaR chart on my campus. After taking the course, I finally understood the importance of the STaR chart to our students and why all educators should be aware of the *Texas Long Range Plan* as well as the technology application TEKS.

Concepts of Educational Technology also introduced me to many technologies that I was previously unaware of. Before this class, I had never heard of a wiki much less created one. Throughout the program, this wiki has been extremely useful as a personal online information hub. I was able to save and share all of my work on my wiki from this class and other classes. I learned about the needs of digital age learners and how they are so different from learners in previous eras. I had never heard of Web 2.0, open source, or the terms Digital Native and Digital Immigrant (Prensky, 2001). Learning about these technologies and learning about the needs of digital natives helped to open my eyes to the importance of technology integration. Although schools are beginning to move in the right direction, we have a long way to go to meet the needs of our twenty-first century learners.

EDLD 5333 Leadership for Accountability

Leadership for Accountability was an extremely useful class in learning how to analyze AEIS data to determine how any specific campus is performing with regards to *No Child Left Behind* (2001) and Adequate Yearly Progress (AYP) ratings. Although finding the data for my campus on the TEA website was easy, fishing through the data took a little more time and focus. Despite the time and effort involved, I appreciated how this class taught me to disaggregate the data to develop a needs assessment for my campus. I learned why data disaggregation is important and what to do with the data. It does no good for a leader to present a bunch of numbers to the faculty with no knowledge of what it all means. I learned how to determine areas of strength and weakness on my campus and to develop an action plan including professional development and specific strategies to use to improve the campus rating and student performance. Without this knowledge, looking at all of the numbers on the AEIS report would be meaningless.

In addition to learning about AEIS data, I learned about the role of the site-based decision-making committee. I knew that this committee existed in schools, but I did not know how representative the membership was and how the committee must come to consensus before implementing new initiatives in the campus improvement plan. This class helped me to understand the importance of each committee member and the processes that the committee follows.

All of the information learned in this class will be helpful to improving individual student and campus performance, which should be the ultimate goal of any good leader.

EDLD 5364 Teaching with Technology

Teaching with Technology reiterated the importance of online collaboration tools. In this class, I was able to work collaboratively with a group of individuals from around the state of Texas to develop a Universal Design for Learning (Rose & Meyer, 2002) lesson that could be used to help advanced as well as struggling students in the classroom through the use of technology. Applying the knowledge gained in this course will help me and my students in the real world. Lessons and book builder developed with UDL will be enormously beneficial to the special education students that I work with on a daily basis. In addition to acquiring knowledge about how to use technology to maximize the learning of my students, I also learned about different learning theories that I can utilize in real life. It is important to know and understand how people learn and to be able to target their individual learning styles as much as possible.

EDLD 5368 Instructional Design

I found this class to be important with regards to really understanding the needs of my students. I learned about the instructional design theories of behavioral, cognitive, and humanistic psychologist as well as the various learning styles of student. This knowledge will be beneficial as I attempt to move my own instruction more into quadrant D and improve the higher-level thinking skills of my students. I also learned about Wiggins & McTighe's (2000) backward design principles. They discussed beginning with the end in mind. Educators must determine which results they are looking for, then determine how those results will be evaluated, and finally develop learning experiences and activities that will lead to the pre-determined results. I used backward design along with the three instructional design theories mentioned above to help build a stronger more effective online course using the learning management

system of *Schoology*. Using what I learned in this class will not only benefit my students, but it will make me a better and more effective educator.

EDLD 5366 Digital Graphics, Animation, and Desktop Publishing

I really enjoyed the *Digital Graphics, Animation, and Desktop Publishing* class. I appreciated not only learning about the different software available but actually being able to apply that learning by developing my own logo, digital animation, and newsletter. To create these products successfully, I used the design principles of contrast, repetition, alignment, and proximity. I found learning with this technology to be fun and engaging. Lessons that are fun and engaging will help to capture my student's attention as we work on using this technology with classroom lessons. I think they will be willing to put more effort into their work if they are permitted to demonstrate their knowledge through a product like a newsletter or digital animation film rather than having to only write a paper on what they learned. "Simple graphics software and...resources and tools found on the Internet, offer students a variety of ways to access content, work with information to develop understanding, and demonstrate what they know" (Wahl & Duffield, 2005, p. 2).

EDLD 5363 Video Technology and Multimedia

The knowledge gained in *Video Technology and Multimedia* can easily be used to increase student performance in my classroom. I can teach my students to create a digital photo story or a movie using Microsoft Movie Maker. These activities have the potential to help my students learn important basic skills such as following directions and sequencing while engaging in fun and relevant activities. The public service announcement that I created with my group turned out to be better than I originally thought it would be. Completing that assignment

reiterated how important planning and collaboration are to a successful product. This is something that I will take back to my classroom also. I will have my students work in collaborative groups more often to help increase not only their quality of work, but their social skills as well. The ability to work collaboratively is imperative to being successful in the 21st century workplace.

Reflection on Overall Program

Now that I have been through all of the classes in the *Educational Technology Leadership* program offered by Lamar University, I can honestly state that I learned and experienced more than I ever thought I would have. Before this program, I had never taken any online courses. I expected to be isolated in all of my classes because of the distance education aspect of this program; however, none of the professors allowed student isolation. I was required to participate in a discussion board activity each week where I communicated with other students in the program as well as the professors. Many of the assignments required collaboration between students. Although I collaborated with others reluctantly in the beginning of this program, I looked forward to working with others to complete assignments as the program progressed. I found that collaboration with the others was not only beneficial, but it was always fun. The online collaboration with colleagues and the assignments allowed me to obtain experience with the technology I was learning about in the class lectures.

The program was extremely beneficial to my knowledge of national, state, and local technology standards; technology procedures; and technology policies. In addition, I learned how to use a lot of the new technology currently available that I never would have otherwise.

Overall, the *Educational Technology Leadership* program offered by Lamar University was well worth the time and effort I put into it. I appreciated the way the professors were extremely concerned about student success in each class and really did a lot to ensure that success. I never felt as though I was alone even though I live an hour and a half away from the campus and have to this day never met any of my classmates in person.

Three Year Professional Development Plan

While it is impossible to know what the future holds, it is important to have a flexible plan to follow. We, as educators, must be prepared for the unknown future. It is after all, what we are teaching our students to do. In the coming school year, I plan on implementing more Web 2.0 technologies in my classroom as well as facilitating the use of Web 2.0 technologies in the classrooms of other teachers. I will do this through modeling the use of technology such as wikis, blogs, and cloud computing using open source software. I will offer and participate in technology professional development on my campus to help increase technology integration. As Wiliam (2007-2008) states, “If we want to change what teachers do in classrooms, then we need to focus on those actions directly” (p. 37).

After spending a year introducing and implementing the new technology with the educators on my campus, I will spend the second year evaluating the use of the technology and perform a needs assessment to better meet the needs of all teachers and improve student achievement. It has been documented that technology can significantly impact student achievement in a positive manner (SEG Research, 2008). I will continue to participate in and provide technology professional development on my campus. I am fortunate to work on a campus where technology integration is viewed as imperative to student improvement. We

already have a system in place that allows for professional development sessions at least once a month that is based on teacher's specific technology needs.

I would hope that Web 2.0 technologies are commonplace by the third year of my professional development plan. This is said with caution because as a technology leader, I know that there will be technology available in three years that is not available today. To address this issue, I will introduce the current *Horizon Report* each year to make teachers familiar with what is in the near future. As in the previous year, I will continue to conduct needs assessments and provide professional development opportunities for the teachers on my campus. I will also continue to model the use of technology in the classroom. The best way to ensure effective technology integration is to model technology use and provide just-in-time professional development (Mouza, 2002/2003).

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Appendix A

Jessica M. Alanis, M.A., CCC/SLP10302 Grandbrook Dr.
Houston, TX 77089
Cell: 281-299-9913

Curriculum Vitae

**PERSONAL IDENTITY**

Name	Jessica M. Alanis
Gender	Female
Date of Birth	February 1, 1979
Religion	Catholic
Address	10302 Grandbrook Dr. Houston, TX 77089
Phone	281-299-9913

EDUCATIONAL BACKGROUND

- **2010-2011** Lamar University, Beaumont TX
M.Ed. in Educational Technology Leadership
- **2004-2006** University of Houston, Houston TX
M.A. in Communication Disorders
- **1997- 2001** Our Lady of the Lake University, San Antonio TX
B.A. in Communication Disorders

PROFESSIONAL EXPERIENCE

- **August 2006 to present** Speech Pathologist at South Houston Elementary School in Pasadena ISD
- **August 2006 to present** Speech Pathologist for MedCare Pediatric Group
- **August 2004 to July 2006** Speech Pathologist Assistant for MedCare Pediatric Group
- **August 2002 to June 2004** Speech Pathologist Assistant at Ortiz Middle School in Houston ISD
- **June 2001 to July 2002** Old Navy- Retail Sales

Professional Certifications and Affiliations

- **ASHA** Member of American Speech and Hearing Association with a Certificate of Clinical Competence in Speech Language Pathology
- **TSHA** Member of the Texas Speech and Hearing Association
- **HACD** Member of the Houston Association of Communication Disorders

ADDITIONAL INFORMATION

- **School-wide Committees**
 - Chairperson for the South Houston Elementary Spelling Bee Committee
 - Member of the Intervention Assistance Team Committee
 - Member of the Science Fair Committee
- **Websites**
 - Pasadena ISD teacher website:
<http://www1.pasadenaisd.org/education/staff/staff.php?sectionid=5357&>
 - Lamar University e-Portfolio:
<https://sites.google.com/site/jalaniseportfolio/>